

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

CORRECTED VERSION

**(19) World Intellectual Property
Organization
International Bureau**



(43) International Publication Date
21 April 2005 (21.04.2005)

PCT

(10) International Publication Number
WO 2005/036467 A1

- (51) International Patent Classification⁷: G06T 11/00**
- (21) International Application Number: PCT/IB2004/051968**
- (22) International Filing Date: 5 October 2004 (05.10.2004)**
- (25) Filing Language: English**
- (26) Publication Language: English**
- (30) Priority Data:**
03103798.9 14 October 2003 (14.10.2003) EP

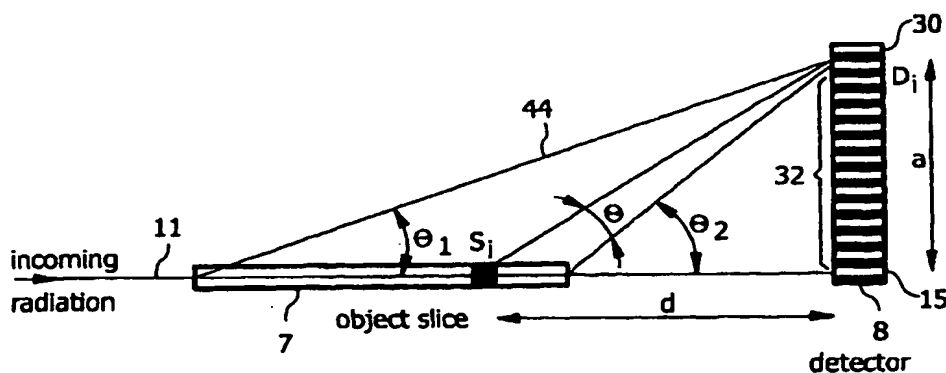
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, CM, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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- (54) Title:** COHERENT-SCATTER COMPUTED TOMOGRAPHY



- (57) Abstract:** Known reconstruction techniques from coherent scattered x-rays apply non-exact reconstruction techniques. According to the present invention, a relatively wide spectrum of wave-vector transfers q of the scattered x-ray photons is acquired. The projection data is interpreted as line integrals in the x - y - q space and the projection data is resorted to correspond to an acquisition along any source trajectory. Due to this, an exact helical reconstruction algorithms may be applied and redundant data may be used to obtain a better image quality.

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